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10/030,798	05/09/2002	Oscar Salonaho	4925-204PUS	5614

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EXAMINER

DEAN, RAYMOND S

ART UNIT PAPER NUMBER

2684

DATE MAILED: 03/14/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

<p align="center">Office Action Summary</p>	Application No. 10/030,798	Applicant(s) SALONAH O ET AL.	
	Examiner Raymond S Dean	Art Unit 2684	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 09 May 2002.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1 - 162 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1 - 162 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 11 January 2002 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date <u>0102</u> . | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Claim Rejections - 35 USC § 102

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

2. Claims 1 – 3, 7 – 22, 25, 27 – 29, 33, 38 – 39, 43 – 47, 51 – 57, 61 – 69, 73 – 82, 86 – 95, 99 – 110, 114 – 126, 130 – 143, 147 – 160 are rejected under 35 U.S.C. 102(e) as being anticipated by Charbonnier (5,241,686).

Regarding Claim 1, Charbonnier teaches a method for selecting a new cell for a station in a cellular telecommunication system, said station being associated with a current cell, said method comprising the steps of: measuring at the station the strength of a communication from said current cell (Column 8 lines 19 – 22, Column 8 lines 41 – 57, Esubi is the strength of the communication); measuring at the station the strength of a communication from at least one other cell (Column 8 lines 41 – 57); modifying the result of the measuring step in which the strength of the communication from at least one other cell and/or the current cell is measured to take into account a condition of said current and/or said at least one other cell if the measured strength of the communication

from the current cell and/or the measured strength of the communication from the at least one other cell satisfy a predetermined condition (Column 2 lines 26 – 47, Column 8 lines 41 – 57, the predetermined condition is loading condition, said loading condition causes a modification or correction of the measured strength); if the modifying step is performed, comparing the measured strength of said communication from the current cell and the measured strength of the communication from the at least one other cell, at least one of the measured strengths being modified in the modifying step (Column 8 lines 41 – 57); and depending on the results of the comparison, changing the current cell with which the station is associated (Column 8 lines 41 – 57).

Regarding Claim 2, Charbonnier teaches all of the claimed limitations recited in Claim 1. Charbonnier further teaches a value is added to the result of the measuring step in which the strength of a communication from the at least one other cell is measured (Column 8 lines 41 – 45).

Regarding Claim 3, Charbonnier teaches all of the claimed limitations recited in Claim 1. Charbonnier further teaches a function is applied to the result of the measuring step in which the strength of a communication from the at least one other cell is measured (Column 8 lines 41 – 45).

Regarding Claims 7, 33, 34, Charbonnier teaches all of the claimed limitations recited in Claims 1, 2, 3. Charbonnier further teaches wherein modifying information as to how the measured strength of the communication from the neighboring cell is to be modified is in the communication from at least one other cell (Column 6 lines 59 – 68).

Regarding Claim 8, Charbonnier teaches all of the claimed limitations recited in Claim 7. Charbonnier further teaches wherein the station is provided with timing information defining when the station should next check for said modifying information (Column 6 lines 59 – 68, the relays continuously broadcast the modifying information, when said relays broadcast said modifying information the mobile then reads said modifying information thus the reception of said modifying information is a cue to the mobile station to read said modifying information, since the broadcasting is done on a continuous or periodic basis the mobile station will check for said broadcast information on a continuous or periodic basis, the mobile station will therefore be provided with timing information enabling said mobile station to periodically read said modifying information).

Regarding Claim 9, Charbonnier teaches all of the claimed limitations recited in Claim 8. Charbonnier further teaches wherein said timing information is in the communication from the neighboring cell (Column 6 lines 59 – 68, the relays continuously broadcast the modifying information, when said relays broadcast said modifying information the mobile then reads said modifying information thus the reception of said modifying information is a cue to the mobile station that it is time to read said modifying information, the cue is therefore the timing information).

Regarding Claims 10, 38 – 39, 43 – 45, Charbonnier teaches all of the claimed limitations recited in Claims 1 – 3, 7 – 9. Charbonnier further teaches wherein the current cell is changed only if the results of the comparison are such that the modified results exceed the measured strength of the communication from the current cell for a

predetermined period of time (Column 8 lines 46 – 57, in order for another cell to be selected the value of the corrected field of said cell must be higher than the corrected field of the current cell for a predetermined period of time).

Regarding Claim 11, Charbonnier teaches all of the claimed limitations recited in Claim 10. Charbonnier further teaches wherein information defining the period of time is in the communication from said current cell (Column 8 lines 46 – 57, in order for another cell to be selected the value of the corrected field of said cell must be higher than the corrected field of the current cell for a predetermined period of time, said predetermined period of time will be obtained from the scanning of the beacon routes).

Regarding Claims 12, 46 – 47, 51 – 55, Charbonnier teaches all of the claimed limitations recited in Claims 1 – 3, 7 – 11. Charbonnier further teaches wherein a value is added to the measured strength of the communication from the current cell prior to the comparing step (Column 8 lines 41 – 50).

Regarding Claim 13, Charbonnier teaches all of the claimed limitations recited in Claim 12. Charbonnier further teaches wherein if the current cell is changed, said value is no longer added to the measured strength of the communication from the old current cell and a value is added to the measured strength of the communication from the new current cell (Column 8 lines 46 – 50, as the mobile station moves the old current cell will eventually not be a part of cells that are scanned thus no correction parameter will not be added to beacon route for said old current cell).

Regarding Claim 14, 56 – 57, 61 – 67 Charbonnier teaches all of the claimed limitations recited in Claims 1 – 3, 7 – 13. Charbonnier further teaches wherein said

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communication from at least one of said current cell and the at least one other cell comprises the broadcast control channel (Column 4 lines 51 – 55, Column 6 lines 59 – 60, the beacon channel is the broadcast control channel).

Regarding Claims 15, 68 – 69, 73 – 80, Charbonnier teaches all of the claimed limitations recited in Claims 1 – 3, 7 – 14. Charbonnier further teaches wherein said station has only one or more common channels in said current cell (Column 4 lines 51 – 55, Column 6 lines 59 – 60, the beacon channel is the broadcast control channel, the broadcast control channel is a common channel).

Regarding Claims 16, 81 – 82, 86 – 93 Charbonnier teaches all of the claimed limitations recited in Claims 1 – 3, 7 – 14. Charbonnier further teaches wherein said station has at least one dedicated channel in said current cell (Column 4 lines 11 – 13, cellular radio communication networks comprise CDMA networks, which have dedicated data channels).

Regarding Claims 17, 94 – 95, 99 – 108 Charbonnier teaches all of the claimed limitations recited in Claims 1 – 3, 7 – 16. Charbonnier further teaches wherein the station is arranged to use the same frequency in the current cell and the at least one other cell (Column 4 lines 11 – 13, cellular radio communication networks comprise CDMA networks, which conduct frequency reuse).

Regarding Claims 18, 109 – 110, 114 – 124 Charbonnier teaches all of the claimed limitations recited in Claims 1 – 3, 7 – 17. Charbonnier further teaches wherein the station is a mobile terminal (Column 8 lines 19 – 22).

Regarding Claims 19, 125 – 126, 130 – 141 Charbonnier teaches all of the claimed limitations recited in Claims 1 – 3, 7 – 18. Charbonnier further teaches wherein said telecommunication system is a code division multiple access system (Column 4 lines 11 – 13, cellular radio communication networks comprise CDMA networks).

Regarding Claims 20, 142 – 143, 147 – 159, Charbonnier teaches all of the claimed limitations recited in Claims 1 – 3, 7 – 19. Charbonnier further teaches wherein said telecommunication system is a time division multiple access system (Column 4 lines 11 – 13, cellular radio communication networks comprise TDMA networks).

Regarding Claims 21, 160, Charbonnier teaches all of the claimed limitations recited in Claims 19, 20. Charbonnier further teaches wherein said telecommunication system is code division/time division multiple access hybrid (Column 4 lines 11 – 13, cellular radio communication networks comprise hybrid CDMA/TDMA networks).

Regarding Claim 22, Charbonnier teaches a station for use in a cellular communication system, said station being associated with a current cell, said station comprising: means for measuring the received strength of a communication from said current cell (Column 8 lines 19 – 22, Column 8 lines 41 – 57, Esabi is the strength of the communication); means the received strength of a communication from at least one other cell (Column 8 lines 41 – 57); means for modifying the measured received strength of the communication from at least one other cell to take into account a condition of said current and/or said at least one other cell if the measured strength of the communication from the current cell and/or the measured strength of the communication from the at least one other cell satisfy a predetermined condition

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(Column 2 lines 26 – 47, Column 8 lines 41 – 57, the predetermined condition is loading condition, said loading condition causes a modification or correction of the measured strength); means for comparing if the modification means modifies the measured received strength of the communication from the at least one other cell, the modified result with the measured received strength of communication from the current cell (Column 8 lines 41 – 57); and means for causing, depending of the results of the comparison performed by the comparing means, the current cell with which the station is associated to be changed (Column 8 lines 41 – 57).

Regarding Claim 25, Charbonnier teaches a network element in a telecommunications system for sending communications to a station associated with a current cell network element being associated with a cell, said network element being arranged to send information to said station (Column 6 lines 59 – 68), said information being used by said station to modify measurements of the strength of communications from at least one other cell (Column 6 lines 59 – 68, Column 8 lines 41 – 45).

Regarding Claim 27, Charbonnier teaches all of the claimed limitations recited in Claim 25. Charbonnier further teaches wherein said network element is associated with the current cell (Column 6 lines 59 – 63).

Regarding Claim 28, Charbonnier teaches all of the claimed limitations recited in Claim 25. Charbonnier further teaches wherein said network element is associated with said at least one other cell (Column 6 lines 59 – 63).

Regarding Claim 29, Charbonnier teaches a method for changing at least one current cell, in a cellular telecommunications network, with which a station is associated,

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said method comprising the steps of: measuring at the station the strength of a communication from said current cell (Column 8 lines 19 – 22, Column 8 lines 41 – 57, Esubi is the strength of the communication); measuring at the station the strength of a communication from at least one other cell (Column 8 lines 41 – 57); modifying the result of the measuring step in which the strength of the communication from at least one other cell and/or the at least one current cell is measured to take into account a condition of said at least one current and/or said at least one other cell if the measured strength of the communication from the current cell and/or the measured strength of the communication from the at least one other cell satisfy a predetermined condition (Column 2 lines 26 – 47, Column 8 lines 41 – 57, the predetermined condition is loading condition, said loading condition causes a modification or correction of the measured strength); if the modifying step is performed, comparing the measured strength of the communication from at least one current cell and the measured strength of a communication from the at least one other cell, at least one of the measured strengths being modified in the modifying step (Column 8 lines 41 – 57); and depending on the results of the comparison, changing the at least one current cell with which the station is associated (Column 8 lines 41 – 57).

Claim Rejections - 35 USC § 103

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the

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invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. Claims 4 – 6, 23 – 24, 26, 30 – 32, 35 – 37, 40 – 42, 48 – 50, 58 – 60, 70 – 72, 83 – 85, 96 – 98, 111 – 113, 127 – 129, 144 – 146, 161 – 162 are rejected under 35 U.S.C. 103(a) as being unpatentable over Charbonnier (5,241,686) in view of Karlsson (5,640,677).

Regarding Claim 4, Charbonnier teaches all of the claimed limitations recited in Claim 1. Charbonnier does not teach wherein said predetermined condition is that the strength of the communication from at least one other cell is greater than a threshold.

Karlsson teaches a predetermined condition that the strength of the communication from at least one other cell is greater than a threshold (Column 11 lines 25 – 28).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to use the predetermined condition taught above by Karlsson in the wireless system of Charbonnier as an alternative means for selecting the best server cell for the mobile station thereby enabling reliable communication links to be maintained as said mobile station changes geographic locations as taught by Karlsson.

Regarding Claim 5, Charbonnier in view of Karlsson teaches all of the claimed limitations recited in Claim 4. Karlsson further teaches wherein said threshold is defined relative to the strength of the communication from the current cell (Column 11 lines 25 – 28, in order for the neighbor cell to be selected the threshold must be higher than the strength of the communication from the current cell thus said threshold will be defined relative to the strength of the communication from the current cell).

Regarding Claim 6, 32, Charbonnier in view of Karlsson teaches all of the claimed limitations recited in Claims 4, 5. Karlsson further teaches wherein information defining said threshold is included in the communication from the current cell (Column 10 lines 3 – 8, Column 10 lines 63 – 67, Column 11 lines 1 – 3, Column 11 lines 10 – 11).

Regarding Claim 23, Charbonnier teaches all of the claimed limitations recited in Claim 22. Charbonnier does not teach said at least one other station requiring a different procedure in order to determine if a new current cell is required.

Karlsson teaches at least one other station requiring a different procedure in order to determine if a new current cell is required (Column 11 lines 25 – 28, the procedure is based on the threshold for the neighbor cell).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to use the different procedure taught above by Karlsson in the wireless system of Charbonnier as an alternative means for selecting the best server cell for the mobile station thereby enabling reliable communication links to be maintained as said mobile station changes geographic locations as taught by Karlsson.

Regarding Claim 24, Charbonnier in view of Karlsson teaches all of the claimed limitations recited in Claim 23. Charbonnier teaches wherein the signaling sent by said network to said at least one station and to said at least one other station is dependent on the procedure required by the respective stations to determine if a new current cell is required (Column 6 lines 59 – 68, the correction parameters are broadcasted because the procedure for selecting a new current cell depends on said correction parameters

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unlike the threshold procedure of Karlsson as described above, which does not depend on said correction parameters).

Regarding Claim 26, Charbonnier teaches a network element in a telecommunications system for sending communications to a station associated with a current cell network element being associated with a cell, said network element being arranged to send information to said station (Column 6 lines 59 – 63), wherein said station is arranged to modify measurements of the received strength of communications from at least one other cell (Column 8 lines 41 – 54).

Charbonnier does not teach wherein said information comprises information defining a threshold and measurements exceeding said threshold.

Karlsson teaches wherein said information comprises information defining a threshold and measurements exceeding said threshold (Column 11 lines 25 – 28).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to use the threshold taught by Karlsson in the wireless system of Charbonnier as an alternative means for selecting the best server cell for the mobile station thereby enabling reliable communication links to be maintained as said mobile station changes geographic locations as taught by Karlsson.

Regarding Claim 30, Charbonnier teaches all of the claimed limitations recited in Claim 2. Charbonnier does not teach wherein said predetermined condition is that the strength of the communication from at least one other cell is greater than a threshold.

Karlsson teaches a predetermined condition that the strength of the communication from at least one other cell is greater than a threshold (Column 11 lines 25 – 28).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to use the predetermined condition taught above by Karlsson in the wireless system of Charbonnier as an alternative means for selecting the best server cell for the mobile station thereby enabling reliable communication links to be maintained as said mobile station changes geographic locations as taught by Karlsson.

Regarding Claim 31, Charbonnier teaches all of the claimed limitations recited in Claim 3. Charbonnier does not teach wherein said predetermined condition is that the strength of the communication from at least one other cell is greater than a threshold.

Karlsson teaches a predetermined condition that the strength of the communication from at least one other cell is greater than a threshold (Column 11 lines 25 – 28).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to use the predetermined condition taught above by Karlsson in the wireless system of Charbonnier as an alternative means for selecting the best server cell for the mobile station thereby enabling reliable communication links to be maintained as said mobile station changes geographic locations as taught by Karlsson.

Regarding Claims 35 – 37, Charbonnier in view of Karlsson teaches all of the claimed limitations recited in Claims 4 – 6. Charbonnier further teaches wherein modifying information as to how the measured strength of the communication from the

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neighboring cell is to be modified is in the communication from at least one other cell (Column 6 lines 59 – 68).

Regarding Claims 40 – 42, Charbonnier in view of Karlsson teaches all of the claimed limitations recited in Claims 4 – 6. Charbonnier further teaches wherein the current cell is changed only if the results of the comparison are such that the modified results exceed the measured strength of the communication from the current cell for a predetermined period of time (Column 8 lines 46 – 57, in order for another cell to be selected the value of the corrected field of said cell must be higher than the corrected field of the current cell for a predetermined period of time).

Regarding Claims 48 – 50, Charbonnier in view of Karlsson teaches all of the claimed limitations recited in Claims 4 – 6. Charbonnier further teaches wherein a value is added to the measured strength of the communication from the current cell prior to the comparing step (Column 8 lines 41 – 50).

Regarding Claims 58 – 60, Charbonnier in view of Karlsson teaches all of the claimed limitations recited in Claims 4 – 6. Charbonnier further teaches wherein said communication from at least one of said current cell and the at least one other cell comprises the broadcast control channel (Column 4 lines 51 – 55, Column 6 lines 59 – 60, the beacon channel is the broadcast control channel).

Regarding Claims 70 – 72, Charbonnier in view of Karlsson teaches all of the claimed limitations recited in Claims 4 – 6. Charbonnier further teaches wherein said station has only one or more common channels in said current cell (Column 4 lines 51 –

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55, Column 6 lines 59 – 60, the beacon channel is the broadcast control channel, the broadcast control channel is a common channel).

Regarding Claims 83 – 85, Charbonnier in view of Karlsson teaches all of the claimed limitations recited in Claims 4 – 6. Charbonnier further teaches wherein said station has at least one dedicated channel in said current cell (Column 4 lines 11 – 13, cellular radio communication networks comprise CDMA networks, which have dedicated data channels).

Regarding Claims 96 – 98, Charbonnier in view of Karlsson teaches all of the claimed limitations recited in Claims 4 – 6. Charbonnier further teaches wherein the station is arranged to use the same frequency in the current cell and the at least one other cell (Column 4 lines 11 – 13, cellular radio communication networks comprise CDMA networks, which conduct frequency reuse).

Regarding Claims 111 – 113, Charbonnier in view of Karlsson teaches all of the claimed limitations recited in Claims 4 – 6. Charbonnier further teaches wherein the station is a mobile terminal (Column 8 lines 19 – 22).

Regarding Claims 127 – 129, Charbonnier in view of Karlsson teaches all of the claimed limitations recited in Claims 4 – 6. Charbonnier further teaches wherein said telecommunication system is a code division multiple access system (Column 4 lines 11 – 13, cellular radio communication networks comprise CDMA networks).

Regarding Claims 144 – 146, Charbonnier in view of Karlsson teaches all of the claimed limitations recited in Claims 4 – 6. Charbonnier further teaches wherein said

telecommunication system is a time division multiple access system (Column 4 lines 11 – 13, cellular radio communication networks comprise TDMA networks).

Regarding Claim 161, Charbonnier in view of Karlsson teaches all of the claimed limitations recited in Claim 26. Charbonnier further teaches wherein said network element is associated with the current cell (Column 6 lines 59 – 63).

Regarding Claim 162, Charbonnier in view of Karlsson teaches all of the claimed limitations recited in Claim 26. Charbonnier further teaches wherein said network element is associated with said at least one other cell (Column 6 lines 59 – 63).

Conclusion

5. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Raymond S Dean whose telephone number is 703-305-8998. The examiner can normally be reached on 7:00-3:30.

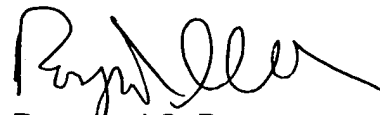
If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Nay A Maung can be reached on 703-308-7745. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



NICK CORSARO
PRIMARY EXAMINER



Raymond S. Dean
February 23, 2005